

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/629,631	07/30/2003	Kouichi Anno	501.42963X00	9122	
20457	7590 06/27/2005		EXAMINER		
	LI, TERRY, STOUT &	TON, MINH TOAN T			
1300 NORTH SUITE 1800	I SEVENTEENTH STR	EET	ART UNIT	PAPER NUMBER	
	J VA 22200 3873		2871		

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

					مو		
		Applicati	on No.	Applicant(s)	<u> </u>		
Office Action Summary		10/629,6	31	ANNO ET AL.			
		Examine	· · · · · · · · · · · · · · · · · · ·	Art Unit			
		Toan Ton		2871			
Period fo	The MAILING DATE of this communication or Reply	appears on the	e cover sheet with th	e correspondence addre	ss		
THE - Exte after - If the - If NO - Fails Any	MAILING DATE OF THIS COMMUNICATION OF THIS COMMUNICATION OF THIS COMMUNICATION OF THIS COMMUNICATION OF THE SIX (6) MONTHS from the mailing date of this communication of period for reply specified above is less than thirty (30) days, and period for reply is specified above, the maximum statutory per ure to reply within the set or extended period for reply will, by streply received by the Office later than three months after the model patent term adjustment. See 37 CFR 1.704(b).	ON. R 1.136(a). In no ev i. a reply within the stat criod will apply and w latute, cause the app	ent, however, may a reply b utory minimum of thirty (30) ill expire SIX (6) MONTHS f lication to become ABANDC	e timely filed days will be considered timely. rom the mailing date of this comm NED (35 U.S.C. § 133).	unication.		
Status							
1)🛛	Responsive to communication(s) filed on <u>0</u>	7 April 2005.	,				
2a)□		This action is r	on-final.				
3)	<u> </u>						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
4)⊠	Claim(s) <u>1-14</u> is/are pending in the applicated 4a) Of the above claim(s) <u>4-7</u> is/are withdra		deration.				
5)[Claim(s) is/are allowed.			:			
6)⊠	Claim(s) 1-4 and 8-14 is/are rejected.						
7)	Claim(s) is/are objected to.			:			
8)□	Claim(s) are subject to restriction ar	nd/or election r	equirement.				
Applicat	ion Papers						
9)[The specification is objected to by the Exan	niner.					
-	The drawing(s) filed on is/are: a)		objected to by th	ne Examiner.			
	Applicant may not request that any objection to	the drawing(s) I	pe held in abeyance.	See 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the con	rrection is requir	ed if the drawing(s) is	objected to. See 37 CFR 1	I.121(d).		
11)	The oath or declaration is objected to by the	e Examiner. N	ote the attached Off	ice Action or form PTO-	152.		
Priority	under 35 U.S.C. § 119						
•	Acknowledgment is made of a claim for fore		_	9(a)-(d) or (f).			
	1. Certified copies of the priority docum			action No			
	2. Certified copies of the priority docum3. Copies of the certified copies of the				ine		
	application from the International Bu	•		ived in this Hational Ote	.gc		
* ;	See the attached detailed Office action for a			ived.			
Attachmer	nt(s)						
	ce of References Cited (PTO-892)		4) Interview Summ				
3) 🔲 Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB		_	il Date al Patent Application (PTO-15	2)		
Раро	er No(s)/Mail Date		6)				

Application/Control Number: 10/629,631

Art Unit: 2871

Election/Restrictions

1. An election of an embodiment directing to claims 1-3 and 8-14 is acknowledged. Thus, claims 4-7 have been withdrawn from consideration.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-3, 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (APA hereinafter) in view of Murai et al (US 6862059).

APA discloses a common transflective LCD device comprising (see at least the description of the related art, e.g., col. 1, [0009]): a substrate, a first pixel electrode formed of a light transmissive conductive layer formed in one optical transmissive region which is formed by partitioning the pixel region; a second pixel electrode formed of a non-light transmissive conductive film is formed on the other light reflective region; the first pixel electrode positioned as a lower layer with respect to an insulation film and a hole is formed in the insulation film in a region corresponding to the light transmissive region so as to expose the first pixel electrode, and the second pixel electrode is formed on a light reflective region of the insulation film.

Application/Control Number: 10/629,631

Art Unit: 2871

APA fails to disclose 'at least a portion corresponding to a side wall surface of the hole formed in the insulation film is arranged in relation to a light shielding film'.

Murai discloses a transflective LCD device comprising a light shielding means disposed on one of a pair of substrates and at least arranged in relation/at least overlapping with at least a portion corresponding to a side wall surface of the hole formed an the insulation film (see at least Figures 4-5). The use of a light shielding means is common and known in the art for yielding advantages such as minimizing light leakage \rightarrow good contrast. Therefore, it would have been obvious to one of ordinary skill in the art to employ a light shielding means arranged at least in relation with at least a portion corresponding to a side wall surface of the hole formed an the insulation film for advantages such as minimizing light leakage \rightarrow good contrast.

Materials such as metal are common and known in the art for bus lines, light shielding means. Forming the shielding means and the bus (gate/data) lines of the same material is also common and known in the art for advantages such as cost-reduction. Therefore, it would have been at least obvious to one of ordinary skill in the art to employ the light shielding means and the gate lines made of the same material, as common and known in the art, for advantages such as cost-reduction.

Murai also discloses the contact hole formed close to the switching element (TFT).

The light shielding means disposed one of the pair of substrates is common and known as at least art-recognized functionally equivalent to the light shielding means disposed on another of the pair of substrates. Further, disposing between below the second pixel electrode would further achieve advantages such as protecting the TFT from damaging. Therefore, it would have been at least obvious to one of ordinary skill in the art to form the light shielding means adjacent to

Application/Control Number: 10/629,631

Art Unit: 2871

the switching element (TFT) (i.e., below the second pixel electrode) for achieving further advantages such as protecting the TFT from damaging.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 23, 2005

